Title:
Voice Modulator

Team Members:
Israel Donato-Ridgley - israelr@mit.edu
Yuechen (Mark) Yang - markyang@mit.edu

Description:
Changing one’s voice is traditionally done through digital means with software like auto-tune, but software processing requires large digital overhead such as an operating system and incurs a large power cost. In our project, we will attempt to have a functional and modular analog voice modulator that will change a voice’s tone and pitch in real time. Our system will include a variety of interconnectable passive, active, and adjustable filters that the user can select and combine to achieve the desired modulation of their voice. The initial design will output the modulated voice through a speaker using a conventional amplifier design with the possibility of radio transmission in future iterations. Since the design is intrinsically modular, we expect to keep expanding the functionality of this device to include a wider range of voice control options.